RAW SEQUENCE LISTING
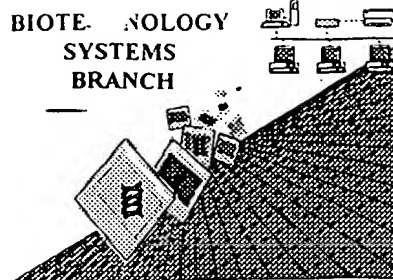# ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: *09/847,519*

Source: *OIPE*

Date Processed by STIC: *5-14-01*

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov **or phone 703-306-4119 (R. Wax)**
PATENTIN 3.0 e-mail help: patin3help@uspto.gov **or phone 703-306-4119 (R. Wax)**

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.
Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO).
Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
http://www.uspto.gov/web/offices/pac/checker

w Sequence Listing Error   mmary

ERROR DETECTED   SUGGESTED   CORRECTION

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1 _____ Wrapped Nucleics   The number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".

2 _____ Wrapped Aminos   The amino acid number/text at the end of each line "wrapped " down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".

3 _____ Incorrect Line Length   The rules require that a line not exceed 72 characters in length. This includes spaces.

4 _____ Misaligned Amino Acid   The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs
Numbering   between the numbering. It is recommended to delete any tabs and use spacing between the numbers.

5 _____ Non-ASCII   This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.

6 _____ Variable Length   Sequence(s) _____ contain n's or Xaa's which represented more than one residue.
As per the rules, each n or Xaa can only represent a single residue.
Please present the maximum number of each residue having variable length and
indicate in the (ix) feature section that some may be missing.

7 _____ PatentIn ver. 2.0 "bug"   A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
sequence(s) _____. Normally, PatentIn would automatically generate this section from the
previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section
to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223>
sections for Artificial or Unknown sequences.

8 _____ Skipped Sequences   Sequence(s) ____ missing. If intentional, please use the following format for each skipped sequence:
(OLD RULES)   (2) INFORMATION FOR SEQ ID NO:X:
(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:
This sequence is intentionally skipped

Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).

9 _____ Skipped Sequences   Sequence(s) ____ missing. If intentional, please use the following format for each skipped sequence.
(NEW RULES)   <210> sequence id number
<400> sequence id number
000

10 _____ Use of n's or Xaa's   Use of n's and/or Xaa's have been detected in the Sequence Listing.
(NEW RULES)   Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

11 _____ Use of "Artificial"   Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules.
(NEW RULES)   Valid response is Artificial Sequence.

12 ✓ Use of <220>Feature   Sequence(s) ____ are missing the <220>Feature and associated headings.
(NEW RULES)   Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial Sequence" or "Unknown"
Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32)   (Sec. 1.823 of new Rules)

13 _____ PatentIn ver. 2.0 "bug"   Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted
file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).
Instead, please use "File Manager" or any other means to copy file to floppy disk.

AMC - Biotechnology Systems Branch - 4/06/2001

```
        RAW SEQUENCE LISTING            DATE: 05/14/2001
        PATENT APPLICATION:  US/09/847,519    TIME: 12:21:48

        Input Set : A:\422usl.app
        Output Set: N:\CRF3\05142001\I847519.raw

   3 <110> APPLICANT: LUCHE, Ralf M.
   4        WEI, Bo
   6 <120> TITLE OF INVENTION: DSP-14 DUAL-SPECIFICITY PHOSPHATASE
   8 <130> FILE REFERENCE: 200125.422US
C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/847,519
C--> 11 <141> CURRENT FILING DATE: 2001-05-01
  13 <150> PRIOR APPLICATION NUMBER: 60/201,322
  14 <151> PRIOR FILING DATE: 2000-05-02
  16 <160> NUMBER OF SEQ ID NOS: 16
  18 <170> SOFTWARE: PatentIn Ver. 2.1
  20 <210> SEQ ID NO: 1
  21 <211> LENGTH: 1165
  22 <212> TYPE: DNA
  23 <213> ORGANISM: Homo sapiens
  25 <400> SEQUENCE: 1
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  27 cgcggccagg ccccggcaca cccagctgca gaaaggagag aaaatccctt ggctctaaaa 120
  28 tgacatctgg agaagtgaag acaagcctca agaatgccta ctcatctgcc aagaggctgt 180
  29 cgccgaagat ggaggaggaa ggggaggagg aggactactg cacccctgga gcctttgagc 240
  30 tggagcggct cttctggaag ggcagtcccc agtacaccca cgtcaacgag gtctggccca 300
  31 agctctacat tggcgatgag gcgacggcgc tggaccgcta taggctgcag aaggcggggt 360
  32 tcacgcacgt gctgaacgcg gcccacggcc gctggaacgt ggacactggg cccgactact 420
  33 accgcgacat ggacatccag taccacggcg tggaggccga cgacctgccc accttcgacc 480
  34 tcagtgtctt cttctacccg gcggcagcct tcatcgacag agcgctaagc gacgaccaca 540
  35 gtaagatcct ggttcactgc gtcatgggcc gcagccggtc agccaccctg gtcctggcct 600
  36 acctgatgat ccacaaggac atgaccctgg tggacgccat ccagcaagtg gccaagaacc 660
  37 gctgcgtcct cccgaaccgg ggctttttga agcagctccg ggagctggac aagcagctgg 720
  38 tgcagcagag gcgacggtcc cagcgccagg acggtgagga ggaggatggc agggagctgt 780
  39 aggcccgact cacagggcca gcagaggcac ttggggacag aggggagagg cagaacatag 840
  40 ccctggccta ggactccaga gaagggatgg tgaaaccgaa gctcgactct tccaaaccat 900
  41 cttgttcaac ttccccatgt gtgctgggga cagggaggac ccagagctgc ccccgggcag 960
  42 agctgagcgc tcagcctctc agcaaaatgg gagggacggg ctccccggct ctgggtcaca 1020
  43 gaggagcatg ccacgctgca ccaagtctcc tgctttggtt ttgttttttt ggtgagaagg 1080
  44 aagagggaaa aagatttta aaatgtgtag gcagtatgtt gtgattaaac gtttggcttt 1140
  45 gtccaaaaaa aaaaaaaaaa aaaaa 1165
  48 <210> SEQ ID NO: 2
  49 <211> LENGTH: 220
  50 <212> TYPE: PRT
  51 <213> ORGANISM: Homo sapiens
  53 <400> SEQUENCE: 2
  54 Met Thr Ser Gly Glu Val Lys Thr Ser Leu Lys Asn Ala Tyr Ser Ser
  55  1               5                  10                  15
  57 Ala Lys Arg Leu Ser Pro Lys Met Glu Glu Glu Gly Glu Glu Glu Asp
  58            20                  25                  30
  60 Tyr Cys Thr Pro Gly Ala Phe Glu Leu Glu Arg Leu Phe Trp Lys Gly
  61            35                  40                  45
  63 Ser Pro Gln Tyr Thr His Val Asn Glu Val Trp Pro Lys Leu Tyr Ile
```

Does Not Comply
Corrected Diskette Needed

pp 2-3

```
64      50                      55                      60
66 Gly Asp Glu Ala Thr Ala Leu Asp Arg Tyr Arg Leu Gln Lys Ala Gly
67   65                      70                      75                      80
69 Phe Thr His Val Leu Asn Ala Ala His Gly Arg Trp Asn Val Asp Thr
70                          85                      90                      95
72 Gly Pro Asp Tyr Tyr Arg Asp Met Asp Ile Gln Tyr His Gly Val Glu
73               100                     105                     110
75 Ala Asp Asp Leu Pro Thr Phe Asp Leu Ser Val Phe Phe Tyr Pro Ala
76           115                     120                     125
78 Ala Ala Phe Ile Asp Arg Ala Leu Ser Asp Asp His Ser Lys Ile Leu
79       130                     135                     140
81 Val His Cys Val Met Gly Arg Ser Arg Ser Ala Thr Leu Val Leu Ala
82 145                 150                     155                     160
84 Tyr Leu Met Ile His Lys Asp Met Thr Leu Val Asp Ala Ile Gln Gln
85               165                     170                     175
87 Val Ala Lys Asn Arg Cys Val Leu Pro Asn Arg Gly Phe Leu Lys Gln
88           180                     185                     190
90 Leu Arg Glu Leu Asp Lys Gln Leu Val Gln Gln Arg Arg Arg Ser Gln
91           195                     200                     205
93 Arg Gln Asp Gly Glu Glu Glu Asp Gly Arg Glu Leu
94     210                 215                     220
97 <210> SEQ ID NO: 3
98 <211> LENGTH: 19
99 <212> TYPE: PRT
100 <213> ORGANISM: Artificial Sequence
102 <220> FEATURE:
103 <223> OTHER INFORMATION: Description of Artificial Sequence: (Peptide)
105 <400> SEQUENCE: 3
106 Val His Cys Val Met Gly Arg Ser Arg Ser Ala Thr Leu Val Leu Ala
107   1           5                   10                  15
109 Tyr Leu Met
113 <210> SEQ ID NO: 4
114 <211> LENGTH: 24
115 <212> TYPE: PRT
116 <213> ORGANISM: Artificial Sequence
118 <220> FEATURE:
119 <223> OTHER INFORMATION: Description of Artificial Sequence: (Peptide)
121 <400> SEQUENCE: 4
122 Asn Gly Arg Val Leu Val His Cys Gln Ala Gly Ile Ser Arg Ser Gly
123   1           5                   10                  15
125 Thr Asn Ile Leu Ala Tyr Leu Met
126               20
129 <210> SEQ ID NO: 5
130 <211> LENGTH: 28
131 <212> TYPE: DNA
132 <213> ORGANISM: Artificial Sequence
134 <220> FEATURE:
135 <223> OTHER INFORMATION: Description of Artificial Sequence: (Nucleotide)
136       primer
```

[handwritten note:] Responses too obvious. What is the source of the genetic material in the sequences? See #12 on the Error Summary sheet.

RAW SEQUENCE LISTING   DATE: 05/14/2001
PATENT APPLICATION: US/09/847,519   · TIME: 12:21:48

        Input Set : A:\422us1.app
        Output Set: N:\CRF3\05142001\I847519.raw

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139 tggcgtccac cagggtcatg tccttgtg                                    28
142 <210> SEQ ID NO: 6
143 <211> LENGTH: 28
144 <212> TYPE: DNA
145 <213> ORGANISM: Artificial Sequence
147 <220> FEATURE:
148 <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
149       primer
151 <400> SEQUENCE: 6
152 cacaaggaca tgaccctggt ggacgcca                                    28
155 <210> SEQ ID NO: 7
156 <211> LENGTH: 22
157 <212> TYPE: DNA
158 <213> ORGANISM: Artificial Sequence
160 <220> FEATURE:
161 <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleotide
162       primer
164 <400> SEQUENCE: 7
165 gccccagccg gtcagccacc ct                                          22
168 <210> SEQ ID NO: 8
169 <211> LENGTH: 170
170 <212> TYPE: PRT
171 <213> ORGANISM: Homo sapiens
173 <400> SEQUENCE: 8
174 Ser Asp Leu Asp Arg Asp Pro Asn Ser Ala Thr Asp Ser Asp Gly Ser
175  1               5                  10                  15
177 Pro Leu Ser Asn Ser Gln Pro Ser Phe Pro Val Glu Ile Leu Pro Phe
178             20                  25                  30
180 Leu Tyr Leu Gly Cys Ala Lys Asp Ser Thr Asn Leu Asp Val Leu Glu
181         35                  40                  45
183 Glu Phe Gly Ile Lys Tyr Ile Leu Asn Val Thr Pro Asn Leu Pro Asn
184     50                  55                  60
186 Leu Phe Glu Asn Ala Gly Glu Phe Lys Tyr Lys Gln Ile Pro Ile Ser
187  65                  70                  75                  80
189 Asp His Trp Ser Gln Asn Leu Ser Gln Phe Phe Pro Glu Ala Ile Ser
190             85                  90                  95
192 Phe Ile Asp Glu Ala Arg Gly Lys Asn Cys Gly Val Leu Val His Cys
193             100                 105                 110
195 Leu Ala Gly Ile Ser Arg Ser Val Thr Val Thr Val Ala Tyr Leu Met
196         115                 120                 125
198 Gln Lys Leu Asn Leu Ser Met Asn Asp Ala Tyr Asp Ile Val Lys Met
199     130                 135                 140
201 Lys Lys Ser Asn Ile Ser Pro Asn Phe Asn Phe Met Gly Gln Leu Leu
202 145                 150                 155                 160
204 Asp Phe Glu Arg Thr Leu Gly Leu Ser Ser
205             165                 170
208 <210> SEQ ID NO: 9
209 <211> LENGTH: 168
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/847,519

DATE: 05/14/2001
TIME: 12:21:49

Input Set : A:\422usl.app
Output Set: N:\CRF3\05142001\I847519.raw

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210 <212> TYPE: PRT
211 <213> ORGANISM: Homo sapiens
213 <400> SEQUENCE: 9
214 Asp Arg Glu Leu Pro Ser Ser Ala Thr Glu Ser Asp Gly Ser Pro Val
215  1               5                  10                  15
217 Pro Ser Ser Gln Pro Ala Phe Pro Val Gln Ile Leu Pro Tyr Leu Tyr
218                 20                  25                  30
220 Leu Gly Cys Ala Lys Asp Ser Thr Asn Leu Asp Val Leu Gly Lys Tyr
221             35                  40                  45
223 Gly Ile Lys Tyr Ile Leu Asn Val Thr Pro Asn Leu Pro Asn Ala Phe
224         50                  55                  60
226 Glu His Gly Gly Glu Phe Thr Tyr Lys Gln Ile Pro Ile Ser Asp His
227  65                  70                  75                  80
229 Trp Ser Gln Asn Leu Ser Gln Phe Phe Pro Glu Ala Ile Ser Phe Ile
230                 85                  90                  95
232 Asp Glu Ala Arg Ser Lys Lys Cys Gly Val Leu Val His Cys Leu Ala
233             100                 105                 110
235 Gly Ile Ser Arg Ser Val Thr Val Thr Val Ala Tyr Leu Met Gln Lys
236             115                 120                 125
238 Met Asn Leu Ser Leu Asn Asp Ala Tyr Asp Phe Val Lys Arg Lys Lys
239         130                 135                 140
241 Ser Asn Ile Ser Pro Asn Phe Asn Phe Met Gly Gln Leu Leu Asp Phe
242 145                 150                 155                 160
244 Glu Arg Thr Leu Gly Leu Ser Ser
245                 165
248 <210> SEQ ID NO: 10
249 <211> LENGTH: 157
250 <212> TYPE: PRT
251 <213> ORGANISM: Homo sapiens
253 <400> SEQUENCE: 10
254 Gly Ala Thr Pro Pro Pro Val Gly Leu Arg Ala Ser Phe Pro Val Gln
255  1               5                  10                  15
257 Ile Leu Pro Asn Leu Tyr Leu Gly Ser Ala Arg Asp Ser Ala Asn Leu
258                 20                  25                  30
260 Glu Ser Leu Ala Lys Leu Gly Ile Arg Tyr Ile Leu Asn Val Thr Pro
261             35                  40                  45
263 Asn Leu Pro Asn Phe Phe Glu Lys Asn Gly Asp Phe His Tyr Lys Gln
264         50                  55                  60
266 Ile Pro Ile Ser Asp His Trp Ser Gln Asn Leu Ser Arg Phe Phe Pro
267  65                  70                  75                  80
269 Glu Ala Ile Glu Phe Ile Asp Glu Ala Leu Ser Gln Asn Cys Gly Val
270             85                  90                  95
272 Leu Val His Cys Leu Ala Gly Val Ser Arg Ser Val Thr Val Thr Val
273             100                 105                 110
275 Ala Tyr Leu Met Gln Lys Leu His Leu Ser Leu Asn Asp Ala Tyr Asp
276             115                 120                 125
278 Leu Val Lys Arg Lys Lys Ser Asn Ile Ser Pro Asn Phe Asn Phe Met
279         130                 135                 140
281 Gly Gln Leu Leu Asp Phe Glu Arg Ser Leu Arg Leu Glu
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RAW SEQUENCE LISTING   DATE: 05/14/2001
PATENT APPLICATION: US/09/847,519   TIME: 12:21:49

Input Set : A:\422us1.app
Output Set: N:\CRF3\05142001\I847519.raw

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285 <210> SEQ ID NO: 11
286 <211> LENGTH: 170
287 <212> TYPE: PRT
288 <213> ORGANISM: Homo sapiens
290 <400> SEQUENCE: 11
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292  1               5                  10                  15
294 Gln Pro Cys Leu Pro Val Pro Ser Val Gly Leu Thr Arg Ile Leu Pro
295              20                  25                  30
297 His Leu Tyr Leu Gly Ser Gln Lys Asp Val Leu Asn Lys Asp Leu Met
298              35                  40                  45
300 Thr Gln Asn Gly Ile Ser Tyr Val Leu Asn Ala Ser Asn Ser Cys Pro
301      50                  55                  60
303 Lys Pro Asp Phe Ile Cys Glu Ser Arg Phe Met Arg Val Pro Ile Asn
304  65                  70                  75                  80
306 Asp Asn Tyr Cys Glu Lys Leu Leu Pro Trp Leu Asp Lys Ser Ile Glu
307              85                  90                  95
309 Phe Ile Asp Lys Ala Lys Leu Ser Ser Cys Gln Val Ile Val His Cys
310              100                 105                 110
312 Leu Ala Gly Ile Ser Arg Ser Ala Thr Ile Ala Ile Ala Tyr Ile Met
313              115                 120                 125
315 Lys Thr Met Gly Met Ser Ser Asp Asp Ala Tyr Arg Phe Val Lys Asp
316      130                 135                 140
318 Arg Arg Pro Ser Ile Ser Pro Asn Phe Asn Phe Leu Gly Gln Leu Leu
319 145                 150                 155                 160
321 Glu Tyr Glu Arg Thr Leu Lys Leu Leu Ala
322              165                 170
325 <210> SEQ ID NO: 12
326 <211> LENGTH: 168
327 <212> TYPE: PRT
328 <213> ORGANISM: Homo sapiens
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331 Pro Ala Gln Ala Leu Pro Pro Ala Gly Ala Glu Asn Ser Asn Ser Asp
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334 Pro Arg Val Pro Ile Tyr Asp Gln Gly Gly Pro Val Glu Ile Leu Pro
335              20                  25                  30
337 Tyr Leu Tyr Leu Gly Ser Cys Asn His Ser Ser Asp Leu Gln Gly Leu
338              35                  40                  45
340 Gln Ala Cys Gly Ile Thr Ala Val Leu Asn Val Ser Ala Ser Cys Pro
341      50                  55                  60
343 Asn His Phe Glu Gly Leu Phe His Tyr Lys Ser Ile Pro Val Glu Asp
344  65                  70                  75                  80
346 Asn Gln Met Val Glu Ile Ser Ala Trp Phe Gln Glu Ala Ile Ser Phe
347              85                  90                  95
349 Ile Asp Ser Val Lys Asn Ser Gly Gly Arg Val Leu Val His Cys Gln
350              100                 105                 110
352 Ala Gly Ile Ser Arg Ser Ala Thr Ile Cys Leu Ala Tyr Leu Ile Gln
353              115                 120                 125
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VERIFICATION SUMMARY   DATE: 05/14/2001
PATENT APPLICATION: US/09/847,519   TIME: 12:21:50

Input Set : A:\422us1.app
Output Set: N:\CRF3\05142001\I847519.raw

L:10 M:270 C: Current Application Number differs, Replaced Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date